

NAME

pygraph - Tool for OpenGL visualization of a graph in PyMol.

VERSION

Version 0.5 9/22/2006

SYNOPSIS

pygraph input_int_file input_coord_file output_py_file [-c *dense_node medium_node sparse_node edge_color*] [-d *dimensions*] [-e] [-g *output_grid_name*] [-h] [-l *edge_width*] [-n *notice_level*] [-p] [-r *resolution*] [-s *sphere_radius*] [-t *dense_trans sparse_trans heavy_trans light_trans*] [-u] [-v *view_scale*] [-x *big_sphere_color*] [-z]

DESCRIPTION

Tool for OpenGL visualization of a graph.

PARAMETERS

-c *dense_node medium_node sparse_node edge_color*

Specify the colors for graph drawing. Nodes are colored on a gradient based on their density (dense->medium->sparse). The *edge_color* is constant, although the edge transparency is on a gradient

-d *dimensions*

Number of *dimensions* used for graph drawing. (2 or 3)

-e Do not write out lines for the edges

-g *output_grid_name*

Generate a density grid file.

-h Print out the man page for help

-l *edge_width*

Set the edge width. Default is 3.

-n *notice_level*

Set the degree of program output. Use:

-n 0 No output
-n 10 Normal program output
-n 20 Parameters useful for reproducing the results
-n 30 All output

-p Draw the nodes as points instead of spheres.

-r *resolution*

Resolution for density grid. (-g) Default is 10.

-s *sphere_radius*

Set the sphere radius. The default is 3.

-t *dense_trans sparse_trans heavy_trans light_trans*

Specify how the transparency is adjusted for nodes and edges (1 is opaque, 0 is transparent). *dense_trans* is the transparency for dense nodes (default 1) *sparse_trans* is the transparency for sparse nodes (default 0.2). *heavy_trans* is for edges with high weights (1) and *light_trans* is for edges with low weights (0.2). Transparencies can be set to negative values to adjust scaling. For example, making the edge transparency range go from 1 to -1 will result in invisible edges for all weights below the half point. Edges and nodes with a 0 or below trans values are not drawn and therefore negative values can help reduce graph sizes for visualization.

-u Force a uniform scaling of the transparency across the nodes. Each node is ranked according to density and is assigned a transparency based on its rank, not its actual density. This can be useful if the density distribution is not nice, or for forcing the XX% lowest density nodes to be thrown out during visualization.

-v *view_scale*

Scale the *resolution* of the density grid (by multiplying the default grid size times *view_scale*. This is the same as **-v** in pvxord (1).

-x *big_sphere_color*

Specify the color of the big sphere output for graphs drawn on a sphere.

-z Specify that the graph was drawn on a sphere.

AVAILABLE COLORS

black
blue
brown
cmyk_blue
cmyk_marine
deep
forest
green
grey
hotpink
magenta
marine
orange
purple
red
slate
teal
wheat

white
yellow

AUTHORS

W. Michael Brown